

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [1012] with the following amended paragraph:

[1012] As design technology advances, rules such as the above-mentioned redundant via rule may become known well after all or a great portion of a complex sub-micron design layout is complete. Having to test for, and make necessary changes to accommodate, such a rule on a cell-by-cell basis would significantly increase the design cycle for the integrated circuit. The present invention provides for automatically testing and correcting most instances (i.e., occurrences) of errors such as isolated via violations, particularly for existing design layouts, and to reduce dramatically, if not eliminate, the number of such errors that must be manually edited to correct the violation. In an exemplary embodiment of the invention, a design flow is described to identify all the existing isolated vias, and place redundant vias next to them so that the product reliability is not compromised.

Please replace paragraph [1017] with the following amended paragraph:

[1017] Figs. 3A, 3B, 3C, and 3D depict a portion of a patch cell in an exemplary design layout, showing several occurrences ~~instances~~ of isolated via violations (in Fig. 3A), dummy covering metal features added to the patch cell within a landing area containing at least one isolated via (in Fig. 3B), remaining dummy covering metal features after performing design rule and electrical rule checks (in Fig. 3C), and additional vias added within the covering metal regions to further correct remaining isolated via violations (in Fig. 3D), to collectively better illustrate an exemplary embodiment of the present invention.

Please replace paragraph [1056] with the following amended paragraph:

[1056] The use herein of a convenient set nomenclature such as “a plurality of wide class object sets $w_0, w_1, w_2, \dots, w_n$ ” need not imply that n must be greater than 2. Rather, n may be equal to 1, in which case there need be only one wide class of objects in addition to the original design geometries themselves, which are represented by the w_0 class. Moreover[[.]], n may alternatively be equal to 2 or more than 2.